

What is claimed is:

1. A heat sink comprising:

a heat-conductive base;

a plurality of parallel fins attached onto the base, each of the fins comprising:

a main body and a flange extending from a bottom of the main body, at least one locking plate extending downwardly from an upper portion of the main body, at least one blocking portion being formed at the main body corresponding to the at least one locking plate, wherein

the at least one locking plate and the at least one blocking portion are respectively located at opposite main faces of the main body of each of the fins, and the at least one locking plate engages with the at least one blocking portion of an adjacent fin.

2. The heat sink as described in claim 1, wherein each of the fins is integrally formed by stamping a metal sheet.

3. The heat sink as described in claim 1, wherein the flange of each of the fins is perpendicularly formed from a bottom edge of the main body.

4. The heat sink as described in claim 1, wherein the at least one blocking portion of each of the fins generally corresponds to a middle portion of the at least one locking plate.

5. The heat sink as described in claim 1, wherein the main body and the at least one blocking portion of each of the fins cooperatively define at least one receiving space receiving the at least one locking plate of an adjacent fin.

6. The heat sink as described in claim 5, wherein the at least one blocking portion comprises a pair of generally L-shaped blocking tabs extending toward each other.

7. The heat sink as described in claim 6, wherein said pair of blocking tabs extends slightly toward the main body, for clamping the at least one locking plate of an adjacent fin.

8. The heat sink as described in claim 1, wherein a distal end of the at least one locking plate of each of the fins is bent inwardly and then upwardly to form a folded portion, the folded portion abutting a bottom of the at least one blocking portion of an adjacent fin.
9. A heat sink comprising:
 - a heat-conductive base;
 - a plurality of parallel fins positioned upon the base, each of said fins including:
 - a planar main body extending in a longitudinal direction;
 - a blocking tab extending from the main body and being offset from the main body in a first lateral direction and defining a space therebetween; and
 - a locking plate extending from the main body, adjacent to the blocking tab, and being offset from the main body in a second lateral direction opposite to said first lateral direction; wherein
 - the locking plate of one fin is inserted into the space of a neighboring fin in the second lateral direction so as to prevent said one fin from being withdrawn from said neighboring fin in said first lateral direction.
10. The heat sink as described in claim 9, wherein the first lateral direction is perpendicular to said longitudinal direction.
11. The heat sink as described in claim 9, wherein the locking plate of said one fin is inserted into the space in a first vertical direction perpendicular to said first lateral direction.
12. The heat sink as described in claim 11, wherein said locking plate of said one fin includes an engagement portion latchably engaged with the blocking tab of said neighboring fin to prevent said one fin from being withdrawn from said neighboring fin in a second vertical direction opposite to said first vertical direction.
13. The heat sink as described in claim 11, wherein said first vertical direction is further perpendicular to said longitudinal direction.

14. The heat sink as described in claim 9, wherein the main body of each of said fins includes one flange extending from one edge of the main body in the second lateral direction and seated upon the base.
15. The heat sink as described in claim 14, wherein said flange and the corresponding locking plate are located far away from each other.
16. The heat sink as described in claim 9, wherein said blocking tab is directly stamped and split from the main body, leaving an opening in the corresponding main body.
17. The heat sink as described in claim 9, wherein said locking plate extends from one edge of the main body
18. The heat sink as described in claim 15, wherein said locking plate extends from another edge of the corresponding main body opposite to said one edge of the corresponding main body.